Fall 2014 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

ST0002 Sutter Maintenance Yard East Levee Sutter Bypass	Overall LMA Rating M *	Total LMA Miles 21.67	* Overall LMA Threshold Percent is less than 10.00%; however, U Rated Miles are present, so the Overall LMA Rating is M instead of A.					
Suiter bypass	IVI "						Design 8	& System
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Obsole	
Nateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Encroachments						0.01		
Animal Control	0.01		0.01	0.05%				
Erosion / Bank Caving		0.01	0.04	0.18%				
Supplemental								
USACE Erosion Survey	0.07		0.07	0.32%				
DWR UCIP Field Study					0.13			
LMA Totals:	0.08	0.01	0.12	0.55% *	0.13	0.01	0.00	0.00

LMA District Cover Sheet

Fall 2014 Levee Inspection Results

Sutter Maintenance Yard East Levee Sutter Bypass

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)					
* Overall LMA Rating (Fall Only)			M						
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.									
* SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall. FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.									
Comments									

Unit Cover Sheet

Fall 2014 Levee Inspection Results

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles
Unit No. 01 Sutter Bypass Levee	Left	21.67

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			М	
Date of Inspection	03/10/2014 - 03/10/2014		11/13/2014 - 11/13/2014	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ma	Location *	N/A		
Category	Earthen Levee			GPS La	atitud	de/Longitude	
Calegory				Start		End	
Item	Operations & Maintenance				٥		0
пеш	Manuals		0		0		
DWR ID	DWR_ST0	002_01_s _ 201	3_4				
		Action/	Comme	nts			
Inspector	Comments	: The LMA ha	s the O	&M manuals	s.		

No Photos

Issue No. Rating ** LM Start 5 Issue Type + Location * N/A Ma LM End Earthen Levee GPS Latitude/Longitude Category Start End **Emergency Supplies &** Item Equipment DWR ID DWR ST0002 01 s 2013 5 Action/Comments

No Photos

Inspector Comments: The LMA has flood fight supplies and equipment.

LM Start		Rating **	Α	Issue No.		6	
LM End		Issue Type +	Ма	Location *	on * N/A		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
				Start		End	
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_ST0002_01_s _ 2013_6						
	Action/Comments						

Inspector Comments: The LMA has completed flood flight training.

No Photos

* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start	0.33	Rating **	М	Issue No.		8	
LM End	0.33	Issue Type +	En	Location *	N/A		
Catagony	Category			GPS Lat	atitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.14746	3°	39.147463	0
пеш				-121.82871	6°	-121.828716	0
DWR ID	DWR_ST0002_01_f _ 2014_8						

Action/Comments

Inspector Comments: FS_ID:35951

EP_NO: 4795

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Unable to locate any indicator of crossing. More research may be necessa 5/22/2013 Same as last inspection. Unable to locate 0/30/2103 Same as last inspectio 5/13/2014

Same as last inspection.

FIELD_STRUCT_DESC: 3-inch gas line along the landward toe.

(extension of App. No. 4795 - PG&E). FS Date: 5/15/2014 8:26:41 AM

LM Start	1.13	Rating **	М	Issue No.		Issue No.		9	
LM End	1.13	Issue Type +	En	Location *		N/A			
Category			GPS Latitude/Longitude						
Calegory				Start		End			
ltom	DWR UCI	P Field Study		39.14086	86°	39.140868	0		
Item				-121.8166	44 °	-121.816644	0		
DWR ID	DWR_ST0	002_01_f _ 2014	4_9						

Action/Comments

Inspector Comments: FS ID:35965

EP_NO: 10932

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pier has no walkway to access pump on pier. This is not necessarily an issu6/22/2013 24in. cmp riser on WS shoulder is full of garbage and dirt and should be cleaned out to inspect siphon breaket0/30/2013 24in. cmp riser was pulled out of levee and there is no sign of a siphon breaker on WS shoulde 5/13/2014 Same as last inspection.

FIELD_STRUCT_DESC: 16-inch steel pipe through the levee, 6.3 feet below the crown. Vertical pump mounted on a steel structure on the

bank. Siphon breaker in a 24-inch corrugated metal pipe riser on the waterward slope. Concrete distribution box on the landward side. JP on WS shoulder. Original Equipment in O+M. Replaced under (App.

10932-Nall) Hand drawings available in permit.

FS Date: 5/15/2014 9:51:16 AM

No Photos

No Photos

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start	1.60	Rating **	U	Issue No.		22	
LM End	1.60	Issue Type + Ma		Location *	WS		
Category	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End	
Item	Erosion /	Bank Caving		39.1370	25 °	39.137025	0
item			-121.8097	13 °	-121.809713	0	
DWR ID	DWR_ST0002_01_f _ 2014_22						
	Action/Comments						

Schedule repair of erosion site prior to the next inspection. Inspector Comments: The beaver hole needs to be repaired. Photo 1 of 1: FA_2014_ST0002_450_22_20141113_00003.jpg



View of the beaver hole at the toe of the levee.

LM Start	1.91	Rating **	С	Issue No.	489			
LM End	1.91	Issue Type +	En	Location *	WS			
Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Encroach	ments		39.1344	47 °	39.134447		
Item				-121.8050	71 °	-121.805071		
DWR ID DWR_ST0002_01_s _ 2014_489								
Action/Comments								

Tree or limb

No Photos

LM Start	3.60	Rating **	С	Issue No.	7		
LM End	3.60	Issue Type +	Ma	Location *	LS		
Category	Earthen L	.evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Itom	Animal Co	ontrol	39.1204	22 °	39.120422	0	
пеш	Item				07 °	-121.779907	0
DWR ID DWR_ST0002_01_f _ 2012_7							
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

En: Enforcement

* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected

U : Unacceptable

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start	6.22	Rating **	Α	Issue No.	23			
LM End	6.22	Issue Type +	Ма	Location *	LS			
Catagonia Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Vegetatio	n		39.0908	35 °	39.090835 °		
item				-121.7527	55 °	-121.752755 °		
DWR ID	DWR ID DWR_ST0002_01_f _ 2014_23							
Action/Comments								

Control annual grass and weeds on the levee slopes and easements.



View of no vegetation on both slopes.

LM Start	10.44	Rating **	М	Issue No.	11		
LM End	10.44	Issue Type +	En	Location *	LS		
Category	Supplemental				ituc	le/Longitude	
Category				Start		End	
Item	DWR UC	DWR UCIP Field Study			7 °	39.033517	0
пеш			-121.72892	5 °	-121.728925	0	
DWR ID	/R ID DWR_ST0002_01_f _ 2014_11						
Action/Comments							

Inspector Comments: FS_ID:36034

EP_NO: 14455

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/22/2013 Carsonite marker on WS shoulder is

broken and should be replaced0/30/2013 Same as last

inspectio5/13/2014 Same as last inspection.

FIELD_STRUCT_DESC: 3 of 3. 4.5-inch Natural gas pipelines through the levee installed 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers on LS toe and WS shoulder.

Design drawings available in the permit. FS Date: 5/15/2014 12:15:36 PM

No Photos

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start 10.44 Rating ** Μ Issue No. 12 Issue Type + Location * LS 10.44 En LM End Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 39.033522° 39.033522 Item -121.728927° -121.728927 ° DWR ID DWR_ST0002_01_f _ 2014_12

No Photos

Action/Comments

Inspector Comments: FS_ID:36031

EP_NO: 14455

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/22/2013 Carsonite marker on WS shouller is

broken and should be replaced0/30/2013 Same as last

inspectios/13/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 3. 4.5-inch Natural gas pipelines through the levee installed 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers on LS toe and WS shoulder.

Design drawings available in the permit. FS Date: 5/15/2014 12:12:50 PM

LM Start	10.44	Rating **	М	Issue No.		13
LM End	10.44	Issue Type +	En	Location *	LS	
Category				GPS La	tituc	le/Longitude
Calegory				Start		End
DWR UCIP Field Study				39.03351	9 °	39.033519°
Item				-121.72892	26°	-121.728926 °
DWR ID	DWR STO	002 01 f 2014	4 13			

Action/Comments

Inspector Comments: FS_ID:36032

EP_NO: 14455

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 5/22/2013 Carsonite marker on WS shoulder is

broken and should be replaced0/30/2013 Same as last

inspection 5/13/2014 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 3. 4.5-inch Natural gas pipelines through the levee installed 2 feet below the crown. Pipes were paced in same trench 1-foot apart. Gasline markers on LS toe and WS shoulder.

Design drawings available in the permit. FS Date: 5/15/2014 12:14:38 PM

No Photos

En: Enforcement

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start	10.98	Rating **	М	Issue No.	1	
LM End	11.05	Issue Type +	Ма	Location *	WS	
Category Supplemental				GPS Lat	ituc	le/Longitude
				Start		End
ltom	USACE E	rosion Survey	,	39.02483	5 °	39.024399
пеш	Item			-121.72692	9 °	-121.726808
DWR ID	DWR_ST0002_01_f _ 2014_1					
Action/Comments						

Inspector Comments: 2011 - Small section of the mid levee slope has eroded from wind wave. 2013: Site is part of the extended inventory, last inspected 2011. [2013 Site ID: SBP_11-1_L]

Rating ** Issue No. LM Start 11.00 Μ 14 Issue Type + En Location * WS LM End 11.00 Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 39.025693° 39.025693 ° Item -121.726895 ° -121.726895 DWR ST0002 01 f 2014 14 DWR ID Action/Comments

Inspector Comments: FS ID:36041

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine type of abandonments/22/2013

Same as last inspection 0/30/2013 Same as last inspectios/13/2014 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 5. 4-foot by 6-foot concrete box culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterward end. Wooden steps on the landward slope. Concrete steps on the waterward end. Originally included in the O+M Manual.

FS Date: 5/15/2014 12:41:10 PM

No Photos

No Photos

A/W: Acceptable but Monitor & Maintain

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start 11.00 Rating ** Issue No. 15 Issue Type + Location * WS 11.00 En LM End Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 39.025683 ° 39.025683 Item -121.726886° -121.726886 ° DWR ID DWR_ST0002_01_f _ 2014_15

Action/Comments

Inspector Comments: FS_ID:36042

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Determine type of abandonmer \$\frac{1}{22}/2013 Same as last inspection 0/30/2013 Same as last inspection 5/13/2014

Same as last inspection.

FIELD_STRUCT_DESC: 2 of 5. 4-foot by 6-foot concrete box culvert through the levee, 31.5 feet below the crown. Wood flap gate and concrete headwall on the waterward end. Wooden steps on the landward slope. Concrete steps on the waterward end. Originally

included in the O+M Manual. FS Date: 5/15/2014 12:42:06 PM

No Photos	
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No Photos

	LM Start	11.01	Rating **	M	Issue No.		16		
	LM End	11.01	Issue Type +	En	Location *		WS		
	Category				GPS Latitude/Longitude				
	Category			Start		End			
	DWR UCIP Field Study		39.0255	60°	39.025560 °				
Item				-121.7268	46 °	-121.726846 °			
DWR ID DWR_ST0002_01_f _ 2014_16						·			

Action/Comments Inspector Comments: FS_ID:36046

EP_NO: 3165

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine type of abandonmer \$5/22/2013

Same as last inspection 0/30/2013 Same as last inspection5/13/2014 Same as last inspection.

FIELD_STRUCT_DESC: 10-inch drainage pipe through the levee, 2.0 feet below the crown. Siphon breaker in a 36-inch CM pipe riser on the waterward shoulder. Flap gate on the waterward end. (App. 3165 -

DWR). Minimalistic design drawings available.

FS Date: 5/15/2014 12:45:24 PM

U : Unacceptable

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start 13.13 Rating ** Issue No. 17 Issue Type + Location * WS 13.13 En LM End Supplemental GPS Latitude/Longitude Category End DWR UCIP Field Study 38.996304 ° 38.996304 Item -121.716290° -121.716290° DWR ID DWR_ST0002_01_f _ 2014_17

No Photos

Action/Comments

Inspector Comments: FS_ID:36051

EP_NO: 15571

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Need to determine status of pipeline. Unable to locate any markers in fiel \$\oldsymbol{6}/23/2013 Same as last inspection. Unable to locate 0/30/2013 Same as last inspectio 5/14/2014

Same as last inspection.

FIELD_STRUCT_DESC: 10.75-IN. STEEL GAS PIPELINE 2 feet below the levee crown. Permit #15571. Design drawings are available.

FS Date: 5/15/2014 12:51:11 PM

LM Start	13.54	Rating **	М	Issue No.		18	
LM End	13.54	Issue Type +	En	Location *		WS	
Catagory	Supplemental Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		38.99180	3°	38.991808	0
пеш				-121.71151	2°	-121.711512	0
DWR ID	DWR_ST0	002_01_f _ 2014	4_18				

Action/Comments

Inspector Comments: FS ID:36063

EP_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Verify work (if any) was done to replace original

equipment with inspectofs/23/2013 Same as last

inspection 10/30/2013 Same as last inspection 5/14/2014 Same as

last inspection.

FIELD_STRUCT_DESC: 18-inch pipe through the levee, 5.5 feet below the crown. Pipe measures 16-inches at pump and on LS outlet. Siphon breaker in a 16-inch corrugated metal pipe riser on the landward slope. Pump on pile structure in the channel. Meter and pole on the

bank. Originally included in O+M manual.

FS Date: 5/15/2014 12:52:11 PM

No Photos

U : Unacceptable

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start	14.70	Rating **	М	Issue No.		19	
LM End	14.70	Issue Type +	En	Location *		WS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	DWR UC	R UCIP Field Study		38.98128	6°	38.981286	0
пеш				-121.69495	8 °	-121.694958	0
DWR ID	DWR_ST0	002_01_f _ 2014	4_19				

Action/Comments

Inspector Comments: FS_ID:36065

EP_NO: 1674

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe exposed on WS toe at road and heavy oil usage that may be a problem at pump on piets/23/2013 Same as last inspection 0/30/2013 Same as last inspection 5/14/2014 Same as last inspection.

FIELD_STRUCT_DESC: 24-inch steel pipe through the levee, 4.0 feet below the crown. Siphon breaker in an 18-inch PVC pipe riser on the landward shoulder. 24-inch concrete standpipe in field on the landward side. Vertical pump on a steel pile structure in the channel. (App. 1674 -

Etcheverry). Minimal design drawings available.

FS Date: 5/15/2014 12:52:57 PM

LM Start	14.91	Rating **	М	Issue No.		20
LM End	14.91	Issue Type +	En	Location *		WS
Supplemental			GPS Latitude/Longitude			
Category				Start		End
Item	DWR UCIP Field Study			38.97937	7 °	38.979377 °
item			-121.69192	9 °	-121.691929 °	
DWR ID	DWR_ST0	002_01_f _ 2014	4_20			·

Action/Comments

Inspector Comments: FS_ID:36066

EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe has not been abandoned properly. It should be

removed from the levee sectio5/23/2013 Same as last

inspection 0/30/2013 Same as last inspection 5/14/2014 Same as

last inspection.

FIELD_STRUCT_DESC: 16-inch steel pipe through the levee, 3.5 feet below the crown. Siphon breakers in 30-inch steel risers on both WS and LS shoulders. Vertical pump on pile structure in stream (removed).

FS Date: 5/15/2014 1:02:31 PM

No Photos

No Photos

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start	16.44	Rating **	М	Issue No.		24	
LM End	16.44	Issue Type +	Ma	Location *	LS		
Earthen Levee			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	Animal Control			38.965188 °		38.965188	
item				-121.6703	65 °	-121.670365	
DWR ID DWR_ST0002_01_f _ 2014_24							
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.



View of the rodent holes on the landside slope.

LM Start	19.46	Rating **	М	Issue No.		21	
LM End	19.46	Issue Type +	En	Location *		LS	
Category			GPS Latitude/Longitude				
Calegory	alegory			Start		End	
Item	DWR UCIP Field Study			38.93242	23 °	38.932423 °	
item				-121.63508	35 °	-121.635085 °	
DWR ID DWR_ST0002_01_f _ 2014_21						·	
Action/Comments							

Inspector Comments: FS_ID:36092

EP_NO: 3165

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to determine type of abandonmer \$\foxtimes /23/2013

Same as last inspection 0/30/2013 Same as last inspection 5/14/2014 Same as last inspection.

FIELD_STRUCT_DESC: 10-inch drainage pipe through the levee, 4.0 feet below the crown. Siphon breaker in 36-inch corrugated metal pipe riser on the waterward shoulder. Flap gate on the waterward end.

(App. 3165 - DWR)

FS Date: 5/15/2014 1:29:02 PM

No Photos

Levee Inspection Report By Mile - Fall 2014

Sutter Maintenance Yard East Levee Sutter Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sutter Bypass Levee	Left	21.67	11/13/2014 11/13/2014	Bob Duffey

LM Start	20.64	Rating **	U	Issue No.		10
LM End	20.64	Issue Type +	En	Location *		LS
Earthen Levee			GPS La	itituc	de/Longitude	
Category				Start		End
Item	Encroach	Encroachments			47 °	38.918147°
item				-121.6245	45 °	-121.624545 °
DWR ID DWR_ST0002_01_s _ 2012_10						
		Action/	Comme	nts		
Building						



View of the house next to the toe of the levee.